

CLAIMS

What is claimed is:

1. A method of processing data packets, comprising:
 receiving a plurality of the data packets at a selected node;
 extracting pertinent information from the data packets, the pertinent information being pertinent to said selected node; and
 5 generating a plurality of response data packets based on the pertinent information, wherein said extracting and generating steps are performed without use of a microprocessor.
2. The method of claim 1, wherein said extracting and generating steps are performed without use of a storage memory.
3. The method of claim 1, wherein said selected node includes a peripheral device, the pertinent information being pertinent to said peripheral device.
4. The method of claim 1, comprising the further step of transmitting a signal indicating that the response data packets should be sent.
5. The method of claim 1, comprising the further step of transmitting the response data packets to a packetized data network.
6. The method of claim 1, wherein said receiving step includes receiving the data packets from a packetized data network.
7. The method of claim 1, wherein said pertinent information includes a packet payload.
8. The method of claim 7, comprising the further step of passing the packet payload to a peripheral device.
9. The method of claim 1, wherein said extracting step includes extracting header information.
10. The method of claim 9, wherein said response data packets include the header information.
11. A data packet communication system, comprising:
 a peripheral device; and
 a filter device connected to said peripheral device, said filter device being configured to receive a plurality of data packets and identify pertinent information in
 5 said data packets, said pertinent information being pertinent to said peripheral device.
12. The system of claim 11, wherein said filter device is microprocessorless.

13. The system of claim 12, wherein said filter device is memoryless.

14. The system of claim 11, further comprising a packet generator connected to said peripheral device and said filter device, said packet generator being configured to generate a plurality of response data packets based on said pertinent information.

15. The system of claim 14, wherein said packet generator is configured to transmit said response data packets.

16. The system of claim 15, wherein said filter device is configured to transmit a signal indicating that said response data packets should be generated.

17. The system of claim 16, wherein said packet generator is configured to transmit said response data packets to a packetized data network.

18. The system of claim 17, further comprising a protocol state machine configured for receiving the signal from said filter device and issuing a request to said packet generator to transmit said response data packets.

19. The system of claim 11, wherein said filter device is configured to receive the data packets from a packetized data network.

20. The system of claim 11, further comprising an interface interconnecting said peripheral device and said filter device

21. A data packet communication device, comprising:

a filter device configured to receive a plurality of data packets and identify pertinent information in said data packets; and

5 a packet generator configured to generate a plurality of response data packets based on said pertinent information.

22. The system of claim 21, wherein each of said filter device and said packet generator is microprocessorless.

23. The system of claim 22, wherein each of said filter device and said packet generator is memoryless.

24. The system of claim 21, wherein said packet generator is configured to transmit said response data packets.

25. The system of claim 24, wherein said packet generator is configured to transmit said response data packets to a packetized data network.

26. The system of claim 21, wherein said filter device is configured to transmit a signal indicating that said response data packets should be generated.

27. The system of claim 26, further comprising a protocol state machine configured for receiving the signal from said filter device and issuing a request to said packet generator to transmit said response data packets.

28. The system of claim 21, wherein said filter device is configured to receive the data packets from a packetized data network.

29. The system of claim 21, wherein said packet generator comprises an N to M decoder.

30. The system of claim 21, wherein said pertinent information comprises selected bytes within said data packets.